

CLAIMS:

1. Cutting element as used in an electric shaver, manufactured from maraging or precipitation-hardenable stainless steel with a surface hardened by plasma nitriding, characterized in that the cutting element is hardened by plasma nitriding on all surfaces of the blade, and a plasma nitriding hardened layer consist of a surface top layer of steel
5 supersaturated with nitrogen and a diffusion layer adjoining the top layer with a hardness ranging from the hardness of the top layer to the hardness of the steel before hardening by means of plasma nitriding.
2. Cutting element as claimed in claim 1, characterized in that the thickness of
10 the hardened supersaturated top layer ranges from 5 μm to 25 μm .
3. Cutting element according to claim 1 or 2, characterized in that the thickness of the diffusion layer ranges from 5 μm to 20 μm .
- 15 4. Cutting element according to any of the foregoing claims, characterized in that the hardness of the hardened supersaturated top layer is at least 1300 HV.
5. Cutting element according to any of the foregoing claims, characterized in that the cutting element is designed for use in a shaver of the dry shaver type.
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6. Cutting element according to any of the claims 1 – 4, characterized in that the cutting element is designed for use in a shaver of the additive shaver type.
7. Electric shaver comprising at least one of the cutting elements according any
25 of the claims 1 – 6.
8. Method of manufacturing a cutting element, characterized in that a cutting element is formed of austenitic stainless steel, whereupon the cutting element is hardened on all surfaces by means of plasma nitriding to a hardness of the top layer of at least 1100 HV.

9. Method according claim 7, characterized in that, after the cutting element has been formed from stainless maraging steel or precipitation-hardenable stainless steel, the cutting element is precipitationally hardened prior to or simultaneously with the plasma
- 5 nitriding.